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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,700	06/27/2003	Michael David Mundt	S01.12-0979/STL 11229.00	9643
27365	7590	12/05/2005	EXAMINER CHEN, TIANJIE	
SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			ART UNIT 2656	PAPER NUMBER

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,700

Applicant(s)

MUNDT ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10,12,15,16,20-25,28 and 29 is/are pending in the application.
4a) Of the above claim(s) 4-6 and 8-10 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,7,12,15,16,20-25,28 and 29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Final-Rejection

Election/Restrictions

1. This application contains claims 4, 5, 6, 9, and 10 drawn to an invention nonelected with traverse in Paper filed 04/27/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

2. Elected claim 8 does not read on the Species II drawn from Figs. 6-8 and is withdrawn from consideration for the following reason: claim 8 recites: "the raised bearing rails extend from a raised center pad and the slider including a stepped bearing surface elevated from a cavity surface having a narrow cross width along the leading edge portion and an expanded width along the intermediate portion of the slider body, wherein the raised bearing rails and the raised center pad are formed on the stepped bearing surface;" which does not read on the Figs 6-8 for the elected Species.

Claim Objections

3. Claims 1, 3, 4-10, 12, 15, 16, 20-25, 28, and 29 are objected to because of the following informalities:

- Claims 1, 3, 4-10, 12, 15, 16, 20-25, 28, and 29 should be properly punctuated. Introducing of new matter should be avoided in punctuating.
- In claim 25, line 1; the last word "the" should be deleted.
- In claim 25, line 6; "including" should be deleted.
- In claim 25, line 6; "recessed" should be changed to --recesses--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites "the intermediate portion having a length dimension no larger than length dimension of the leading edge portion and the trailing edge portion." Applicant elected Species II, drawn from Figs. 6-8, and defines 160 as the "leading edge portion," 162 as the "trailing edge portion," and 156 as the "intermediate portion." However, Fig. 6 shows that the intermediate portion do have a length dimension larger than length dimension of the leading edge portion and the trailing edge portion, which is contrast with the limitation recited in claim 1. One skilled in the art to which it pertains, or with which it is most nearly connected, cannot make and/or use the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Murray (US 5,353,180).

Claim 1, Murray shows an air bearing slider including: a slider body including a leading edge (119 side), a trailing edge (154 side) and opposed sides, and including an elongate length between the leading and trailing edges forming a leading edge portion (See attached Fig. 10 in next page), a trailing edge portion, and an intermediate portion proximate to a center axis of the slider body; and a cross width between the opposed sides; and the intermediate portion having a length dimension no larger than length dimensions of the leading edge portion and the trailing edge portion and the slider body including a center portion and opposed side portion, and a raised bearing surface 158 elevated above milled surface, and the raised bearing surface along the

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leading edge portion of the slider body having a narrow cross width at 160 within the center portion of the slider body, and the raised bearing surface or surfaces along the intermediate portion having an expanded cross width relative to the cross width of the raised bearing surface or surfaces along the leading edge portion of the slider body.

6. Claim 21, 28, 3, 22-25, 7, 12, 15, 16, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 6,411,468).

Claim 21, Park et al shows an air bearing slider in Fig. 5, including: a slider body having a leading edge, a trailing edge and opposed sides; and raised bearing surface 150+151 having a perimeter surface profile including a narrow leading edge cross width, an expanded intermediate cross width and a trailing edge profile having a narrow cross width relative to the expanded intermediate cross width and a raised center pad 190 proximate to the trailing edge spaced from opposed sides of the slider body.

Claim 28, Park et al further shows that the raised bearing surfaces include divergent bearing surfaces 150 and 151 extending along an intermediate portion of the slider body.

Claim 3, Park et al further show that divergent bearing surfaces include opposed side rails 150 and 151 angled outwardly in a direction of the trailing edge.

Claim 22, Park et al further shows that the angled side rails extend from a raised center portion 141 having a narrow width dimension to provide the narrow cross width for the raised bearing surface or surfaces proximate to the leading edge of the slider body.

Claim 23/3/28/21, Park et al shows an air bearing slider in Fig.5, including: a slider body having a leading edge, a trailing edge and opposed sides; and raised bearing surface 150+151 having a perimeter surface profile including a narrow leading edge cross width, an expanded intermediate cross width and a trailing edge profile having a narrow cross width relative to the expanded intermediate cross width and a raised center pad 190 proximate to the trailing edge spaced from opposed sides of the slider body; these raised bearing surfaces include divergent bearing surfaces 150 and 151 extending along an intermediate portion of the slider body; divergent bearing surfaces include opposed side rails 150 and 151 angled outwardly in a direction of the trailing edge; and a leading edge stepped surface 142 elevated from a cavity surface and recessed from the raised bearing surface or surfaces of the angled side rails 151 and 152.

Claim 24, Park et al shows in Fig. 6 that the slider body includes a stepped bearing surface 150+151 having a tapered outer profile elevated from a cavity surface and the angled side rails are formed on the tapered stepped bearing surface.

Claim 7; Park et al shows that the divergent bearing surfaces 150+151 include raised bearing rails on opposed sides of a cross axis of the slider body along the intermediate portion of the slider body and the raised bearing rails angled outwardly in a direction toward the trailing edge of the slider body to form the narrow leading edge cross width along a leading edge portion and the expanded intermediate cross width along the intermediate portion of the slider body.

Claim 25, Park et al further shows in Fig. 6 that a stepped bearing surface 142 recessed from the raised surfaces 150 and 151 proximate to the divergent bearing

surface or surfaces 150 and 151 and inherently pressurizes the divergent bearing surface or surfaces.

Claim 12, as described above, Park et al shows an air bearing slider including: a slider body having a leading edge, a trailing edge, opposed sides and a cross width between the opposed sides and a raised bearing surface or surfaces elevated above a recessed surface or surfaces and the raised bearing surface or surfaces having a narrow cross width along a leading edge portion of the slider body and a raised center portion spaced from opposed sides proximate to the trailing edge of the slider body.

Claim 15, as described above, Park et al shows that the raised bearing surface or surfaces include divergent bearing rails or surfaces which extend outwardly from a raised center portion along the leading edge portion of the slider body.

Claim 16, Park et al shows in Fig. 6 a stepped bearing surface 142 recessed from the raised bearing surfaces 150 and 151 and elevated above a cavity surface and the divergent bearing rails 150 and 151 are formed on the stepped bearing surface.

Claim 29, Park et al shows that the stepped bearing surface 142 recesses from the raised bearing surfaces 150 and 151 and elevated above a cavity surface.

7. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al (US 6,275,467).

Claim 20, Wang et al shows an air bearing slider in Fig. 2 including: a slider body including a leading edge, a trailing edge and opposed sides; and bearing surface means on the slider body for providing a nodal bearing pressure profile (Fig. 3), which would limit nodal pressurization.

Response to Arguments

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TIANJIE CHEN
PRIMARY EXAMINER